

## REMARKS

The Office Action mailed November 10, 2003 has been received and the Examiner's comments carefully reviewed. Figure 9 has been formalized. Claims 1, 12, 21, and 29 have been amended. No new subject matter has been added. Claims 1-32 are pending in this application. Applicant respectfully submits that the pending claims are in condition for allowance.

### I. Drawing

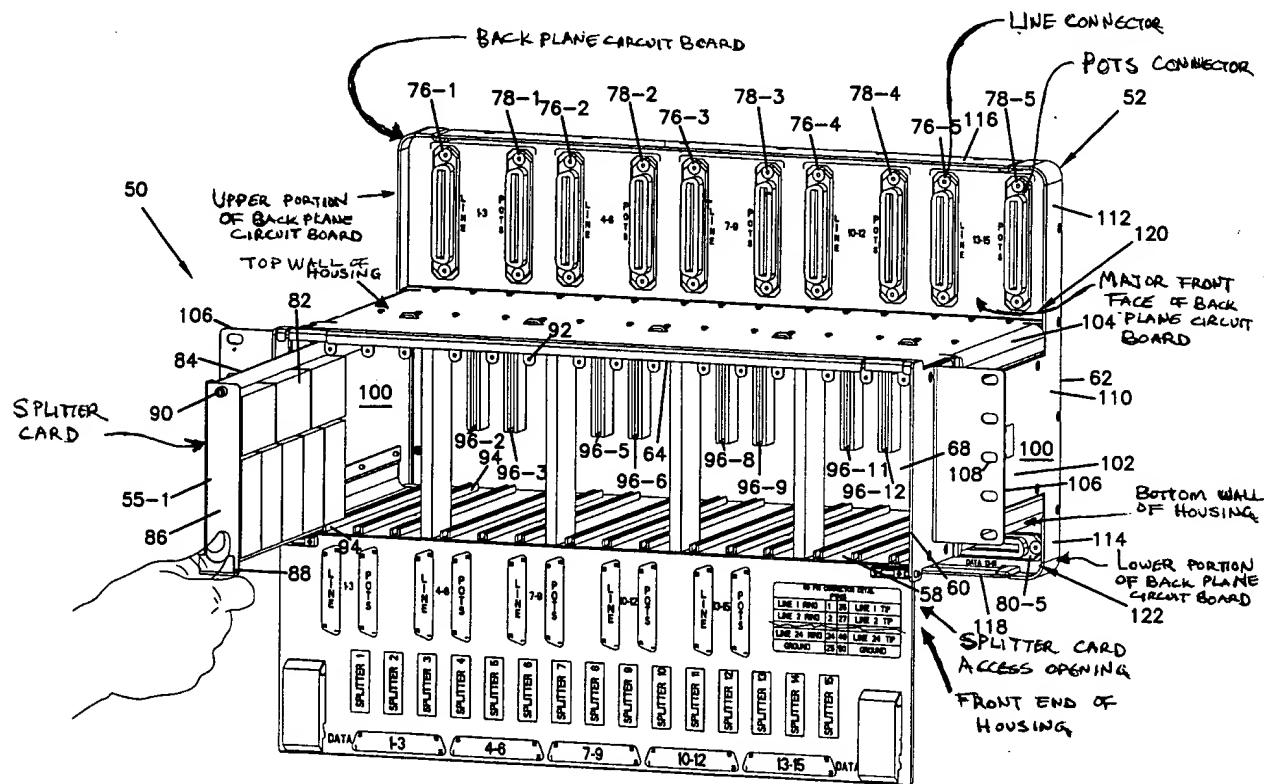
Applicants thank the Examiner for approving the corrections to FIG. 9. FIG. 9 has been formalized according to the Examiner's objection.

### II. Claims

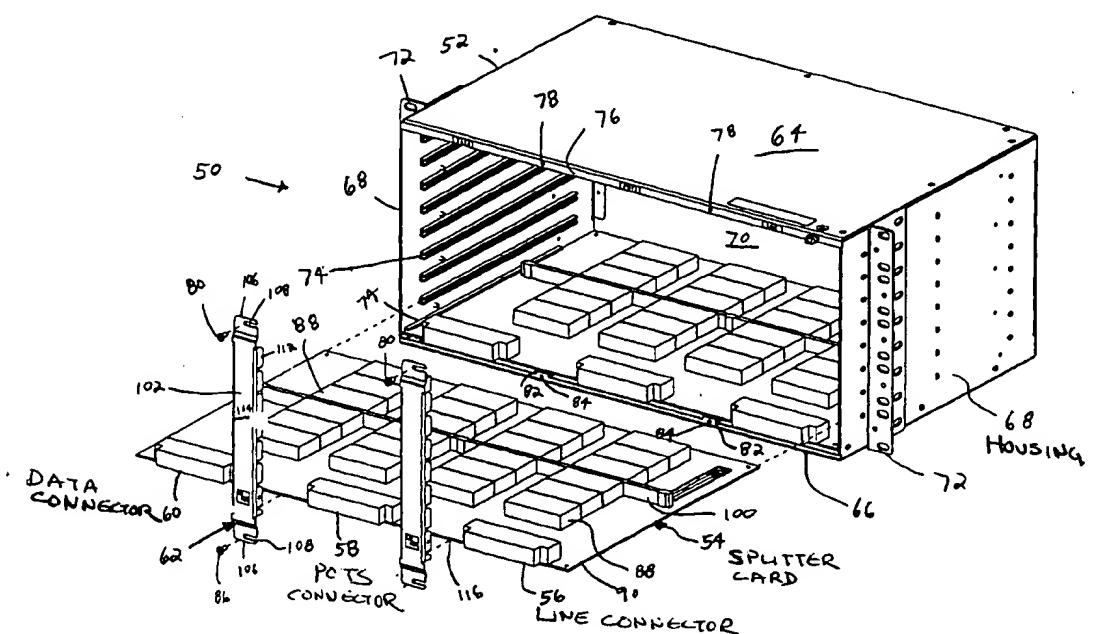
Claims 1-32 were rejected under 35 U.S.C. § 102(e) and (f) as being anticipated by *Witty et al.* (6,614,665) (the '665 patent). In addition, claims 1-7, 12-16, and 29-32 were provisionally rejected under 35 U.S.C. 102(e) and (f) as being anticipated by copending Application No. 09/815,386 of *Witty et al.* now a PG-PUB (20020136396 A1) (the '396 publication) and copending Application No. 09/815,161 of *Witty et al.* now a PG-PUB (20020136392 A1) (the '392 publication). These rejections are traversed and addressed in detail below.

## A. Background

Before separately addressing the substantive points raised in the Office Action, it should be noted that the '392 publication, the '396 publication, and the '665 patent fundamentally differ from the present invention. Most saliently, none of the references include a back plane circuit board that supports lifeline functions and includes a forwardly facing face that extends beyond the housing (e.g., includes an upper portion that extends above the housing or a lower portion that extends below the housing) on which telecommunication connectors (e.g., LINE, POTS, and DATA connectors) are mechanically coupled as shown in the figure below.

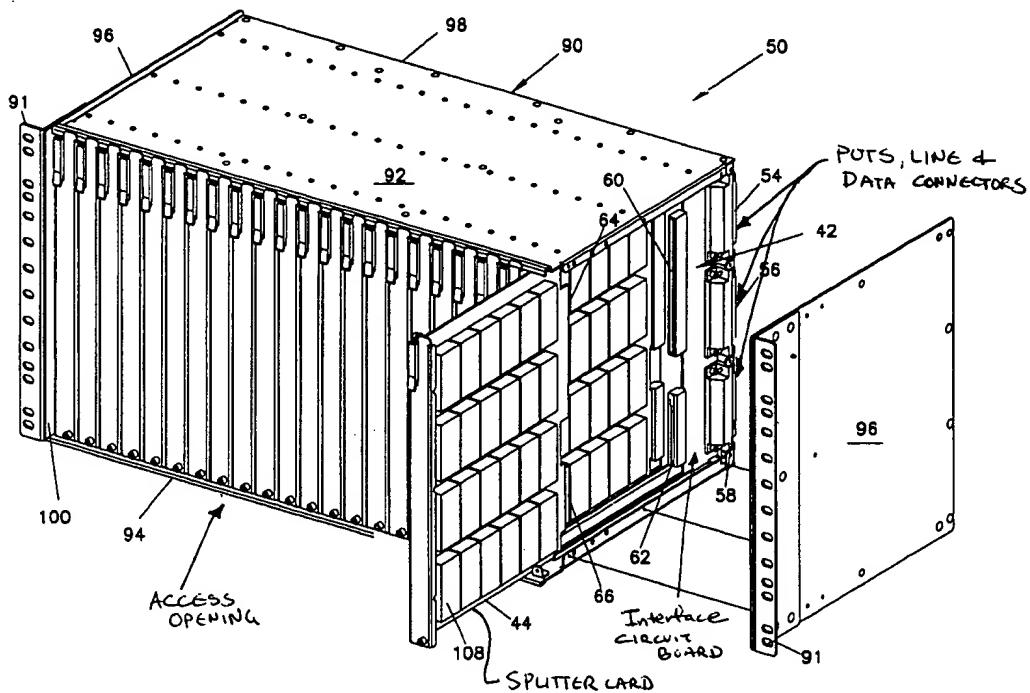


cards to be removed while the POTS and the LINE connectors remain electrically connected so that emergency 911 service is never disconnected. See FIG. 4(shown above), 13B, and page 15, line 28-page 16, line 9 of the present application. The POTS and LINE connectors in the '392 publication and the '396 publication are not connected to a circuit board that interfaces between the splitter cards and the POTS and LINE connectors. Instead, the POTS and LINE connectors are, as shown below, mounted directly to the splitter cards such that disconnecting the splitter cards from the POTS and LINE signal cables (e.g., for repair or replacement of a splitter card) interrupts 911 service provided to the end user.



The '665 patent fundamentally differs from the present invention in that it does not relate to a front access telecommunication device that includes a back plane circuit board having a forwardly facing major face that extends beyond the housing on which telecommunication connectors are mechanically coupled. In the present invention, the POTS, LINE, and DATA connectors face in the direction of the splitter card access opening. The front facing feature of the present invention is advantageous because it allows the system to be mounted in a cabinet, or any other structure that only allows access from one face, whereas the rear access systems can

only be mounted on racks, or other structures that allow access from both faces. See page 1, line 21-page 2, line 7; page 2 lines 17-19; page 12 lines 17-23, and page 21 lines 5-22 of the present invention. As shown below, in the '665 patent, the connectors face in the direction opposite the access opening.



As shown above, the interface circuit boards in the '665 patent do not define a back plane circuit board having a forwardly facing major front face or a back plane circuit board that extend beyond the housing; rather, the interface circuit boards 42 are perpendicular to the back plane of the housing and are located completely within the housing.

## **B. Anticipation**

### **1. Claims 1**

Claims 1 was rejected under 35 U.S.C. § 102(e) and (f) as being anticipated the '665 patent. In addition, claims 1 was provisionally rejected under 35 U.S.C. 102(e) and (f) as being anticipated by the '396 publication and the '392 publication. These rejections are traversed.

Claim 1 recites a telecommunication device comprising, among other things, a chassis including a card housing containing a plurality of splitter cards, the housing including front and back ends, the front end defining an access opening for allowing the splitter cards to be inserted into or removed from the card housing; a circuit board positioned at the back end of the housing, the circuit board including a major front face that faces toward the front end of the housing, the circuit board also including an upper portion that extends higher than the top wall of the housing and a lower portion that extends lower than the bottom wall of the housing; a plurality of card edge connectors being mechanically coupled to the major front side of the circuit board; first telecommunications connectors mechanically coupled to the major front face of the circuit board at the upper portion of the circuit board; second telecommunications connectors mechanically coupled to the major front face of the circuit board at the lower portion of the circuit board; and the card edge connectors being electrically connected to the first and second telecommunications connectors by the circuit board.

As addressed in the background, the '665 patent fails to disclose a front access splitter housing or a circuit board that includes an upper portion that extends higher than the top wall of the housing or a lower portion that extends lower than the bottom wall of the housing. As discussed in the background, the '665 patent discloses a plurality of circuit boards 42 that are located fully within the chassis housing. See the '665 patent FIGS. 3 and 4; column 4, paragraph 2. In addition, in the '665 patent, none of the circuit boards 42 include a major front face that faces towards the front end of the housing, rather the circuit boards 42 are orientated perpendicular to the front face of the housing. As such, the '665 patent fails anticipate claim 1. Claims 2-11 depend on and further limit claims 1, therefore, claims 2-11 are not anticipated by the '665 patent for at least the same reasons.

Also, the '396 publication fails to disclose a circuit board that includes an upper portion that extends higher than the top wall of the housing or a lower portion that extends lower than the

bottom wall of the housing. In fact, the '396 publication completely lacks a circuit board that interfaces between the POTS and LINE connectors and splitter cards. Instead, the POTS and LINE connectors are mounted directly to the splitter cards. See the '396 publication FIG. 4 and 5. As such, 396 does not anticipate claims 1. Claims 2-11 depend on and further limit claims 1, therefore, claims 2-11 are not anticipated by the '396 publication for at least the same reasons.

Like the '396 publication, the '392 publication also fails to disclose a circuit board that includes an upper portion that extends higher than the top wall of the housing or a lower portion that extends lower than the bottom wall of the housing. They also lack a circuit board that interface between the splitter cards and the POTS and LINE connectors. See FIG. 4 and 5. Therefore, the '392 publication does not anticipate claims 1. Claims 2-11 depend on and further limit claims 1, therefore, claims 2-11 are not anticipated by the '392 publication for at least the same reasons.

## 2. Claim 12

Claims 12 was rejected under 35 U.S.C. § 102(e) and (f) as being anticipated by the '665 patent. In addition, claims 12 was provisionally rejected under 35 U.S.C. 102(e) and (f) as being anticipated by the '396 publication and the '392 publication. These rejections are traversed.

Claim 12 recites a telecommunications device comprising, among other things, a chassis including a housing, the housing including front and back ends; a circuit board positioned at the back end of the housing, the circuit board including a major front face that faces toward the front end of the housing, the circuit board also including an upper portion that extends higher than the top wall of the housing and a lower portion that extends lower than the bottom wall of the housing; first telecommunications connectors mechanically coupled to the major front face of the circuit board at the upper portion of the circuit board; second telecommunications connectors mechanically coupled to the major front face of the circuit board at the lower portion of the circuit board.

As discussed above, the '665 patent fails to disclose a circuit board that includes an upper portion that extends higher than the top wall of the housing or a lower portion that extends lower than the bottom wall of the housing. As such, the '665 patent fails anticipate claim 12. Claims 13-20 depend on and further limit claims 12, therefore, claims 13-20 are not anticipated by the '665 patent for at least the same reasons.

Likewise, as discussed above, the '396 publication fails to disclose a circuit board that includes an upper portion that extends higher than the top wall of the housing or a lower portion that extends lower than the bottom wall of the housing. Accordingly, 396 does not anticipate claims 12. Claims 13-20 depend on and further limit claims 12, therefore, claims 13-20 are not anticipated by the '396 publication for at least the same reasons.

The '392 publication also fails to disclose a circuit board that includes an upper portion that extends higher than the top wall of the housing or a lower portion that extends lower than the bottom wall of the housing. See FIG. 4 and 5. Therefore, the '392 publication does not anticipate claims 12. Claims 13-20 depend on and further limit claims 12, therefore, claims 13-20 are not anticipated by the '392 publication for at least the same reasons.

### **3. Claim 21**

Claims 21 was rejected under 35 U.S.C. § 102(e) and (f) as being anticipated by the '665 patent. In addition, claims 21 was provisionally rejected under 35 U.S.C. 102(e) and (f) as being anticipated by the '396 publication and the '392 publication. These rejections are traversed.

Claim 21 recites a telecommunications device comprising, among other things, a chassis including a housing including front and back ends; a circuit board positioned at the back end of the housing, the circuit board including a major front face that faces toward the front end of the housing, the circuit board also including a first portion that extends generally perpendicularly beyond the first wall of the housing; telecommunications connectors mechanically coupled to the front face of the circuit board at the first portion of the circuit board.

The '665 patent fails to disclose a circuit board that includes a first portion that extends beyond the first wall of the housing. As discussed above, the '665 patent discloses a plurality of circuit boards that are located within the chassis housing. See 665 FIGS. 3 and 4; column 4, paragraph 2. In addition none of the circuit boards face towards the front end of the housing, they are all perpendicular to the back end of the housing. Accordingly, the '665 patent does not anticipate claim 21. Claims 22-28 depend on and further limit claim 21, therefore, claims 22-28 are not anticipated by the '665 patent for at least the same reasons.

As discussed above, the '396 publication fails to disclose a circuit board including an extension portion that extends beyond one of the top and bottom walls of the housing. In, the '396 publication there is no circuit board that interfaces between the POTS and LINE connectors

and splitter cards. See the '396 publication FIG. 4 and 5. As such, the '396 publication does not anticipate claim 21. Claims 22-28 depend on and further limit claim 21. As such, that are not anticipated by the '396 publication for at least the same reasons.

Like the '396 publication, the '392 publication also fails to disclose a circuit board that includes an upper portion that includes an extension portion that extends beyond one of the top and bottom walls of the housing. See FIG. 4 and 5. Therefore, the '392 publication do not anticipate claims 21. Claims 22-28 depend on and further limit claims 21, therefore, claims 22-28 are not anticipated by the '392 publication for at least the same reasons.

#### 4. Claim 29

Claims 29 was rejected under 35 U.S.C. § 102(e) and (f) as being anticipated by the '665 patent. In addition, claims 29 was provisionally rejected under 35 U.S.C. 102(e) and (f) as being anticipated the '396 publication and the '392 publication. These rejections are traversed.

Claim 29 recites a telecommunications device comprising, among other things, a chassis including a housing, the housing including front and back ends; a circuit board positioned at the back end of the housing, the circuit board including a major front side that faces toward the front end of the housing, the circuit board also including an extension portion that extends generally perpendicularly beyond one of the top and bottom walls of the housing; telecommunications connectors mechanically coupled to the major front side of the circuit board at the extension portion of the circuit board.

The '665 patent fails to disclose a circuit board that includes an extension portion that extends beyond one of the top and bottom walls of the housing. As discussed above, the '665 patent discloses a plurality of circuit boards that are located within the chassis housing. See 665 FIGS. 3 and 4; column 4, paragraph 2. In addition, none of the circuit boards face towards the front end of the housing; the circuit boards are all perpendicular to the back end. Accordingly, the '665 patent does not anticipate claim 29. Claims 30-32 depend on and further limit claims 29, therefore, claims 30-32 are not anticipated by the '665 patent for at least the same reasons.

As discussed above, the '396 publication fails to disclose a circuit board including an extension portion that extends beyond one of the top and bottom walls of the housing. In, the '396 publication there is no circuit board that interfaces between the POTS and LINE connectors and splitter cards. See the '396 publication FIG. 4 and 5. As such, the '396 publication does not

anticipate claim 29. Claims 30-32 depend on and further limit claim 29. As such, that are not anticipated by the '396 publication for at least the same reasons.

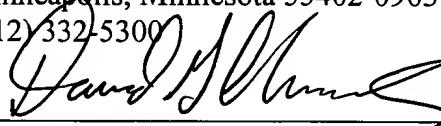
Like the '396 publication, the '392 publication also fails to disclose a circuit board that includes an extension portion that extends beyond one of the top and bottom walls of the housing. See FIG. Therefore, the '392 publication does not anticipate claims 29. Claims 30-32 depend on and further limit claims 29, therefore, claims 30-32 are not anticipated by the '392 publication for at least the same reasons.

It is respectfully submitted that each of the presently pending claims (claims 1-32) is in condition for allowance and notification to that effect is requested. The Examiner is invited to contact Applicant's representative 612-336-4617 if it is believed that the prosecution of this application may be assisted thereby.

Although certain arguments regarding patentability are set forth herein, there are many other arguments and reasons why the claimed invention is patentably distinct. Applicant reserves the right to raise these arguments in the future.

Respectfully submitted,

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

  
\_\_\_\_\_  
David G. Schmaltz  
Reg. No. 39,828  
DGS/JEL/jt

Date: Feb 10, 2004

